

RECEIVED  
CENTRAL FAX CENTER  
MAR 16 2006

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No. A01446  
KC/

In re application of:  
Thomas Richard Tepe

:

Serial No.: 10/665,329 : Group Art Unit: 1714

Filed: September 18, 2003 : Examiner: Vickey M. Ronesi

For: Thickener for High-Surfactant Aqueous Systems

DECLARATION UNDER 37 C.F.R. § 1.132

I, Fanwen Zeng, of 48 Hudnut Lane, Belle Mead, N.J. 08502, declare and say as follows:

1. I have been employed at the Rohm and Haas Company since 1999. I have a Bachelor of Science degree in Chemistry from Nanjing University (1987), and a Ph.D. in Chemistry from University of Illinois at Urbana-Champaign (1997). I have been involved with our Consumer and Industrial Specialties Chemicals business since 2001, with our Plastics Additives business from 1999 to 2000, and the Coatings business from 2000 to 2001. My job responsibilities have included polymer synthesis. I am currently a Senior Scientist.

2. I have been the coinventor of eight U.S. patent applications filed during my tenure at Rohm and Haas Company.

3. I have prepared, or supervised preparation of the polymers used in the present invention, and I am thoroughly familiar with its subject matter and

background. I have read the Official Action dated December 22, 2005 in the above-mentioned US patent application (Serial No. 10/665,329):

4. In January - February, 2006, I supervised preparation (in Spring House, PA) of polymers having the following compositions:

60EA/30MAA/10Lipo1//0.2DAP/0.1n-DDM

60MMA/10MAA/20AA/10Lipo1//0.2DAP/0.1n-DDM

5. In February - March, 2006, I supervised preparation (in Spring House, PA) of formulations containing 22.3% surfactant, as described in Examples on pages 7-9 of the present application, with the polymers listed above in paragraph 4. The viscosity and suspending ability of these compositions were measured as described in the application. The results are presented in the following tables, along with those from polymers taken from Tables 1 and 2 in the present application.

Table A

Rheology Modifier (weight % monomer)	Viscosity @ 0.6 d/cm <sup>2</sup> (no clay)	Viscosity @ 0.6 d/cm <sup>2</sup> (0.08% clay)	Viscosity Change, %	Viscosity @ ca. 1000 d/cm <sup>2</sup> (no clay)	Viscosity @ ca. 1000 d/cm <sup>2</sup> (0.08% clay)	Viscosity Change, %
60EA/10MAA/20AA/ 10Lipo1//0.2DAP/0.1nDDM (Table 1, entry 3)	119.0	206.5	73.6	23.3	26.9	15.5
60MMA/10MAA/20AA/ 10Lipo1//0.2DAP/0.1nDDM	97.05	133.8	37.9	51.53	56	8.7

Table B

Rheology Modifier (weight % monomer)	Viscosity @ 0.6 d/cm <sup>2</sup>	Viscosity @ 2.2 d/cm <sup>2</sup>	slope at low shear	resin beads suspended?
60MMA/10MAA/20AA/ 10Lipo1//0.2DAP/0.1nDDM	133.8	111.5	-13.9	N
60EA/30MAA/10Lipo1// 0.2DAP/0.1nDDM	652.4	626	-16.5	N
60EA/10MAA/20AA/ 10Lipo1//0.2DAP/0.1nDDM (Table 2, entry 7)	958.5	536.2	-263.94	Y

It is evident from the data that the polymer prepared with MMA in place of EA does not provide, in a high-surfactant composition, the desired increase in viscosity at low

shear rates (see Table A, % viscosity change in the fourth column), the ability to suspend resin beads or the desired large negative slope at low shear (Table B, first entry). Overall, the polymer containing MMA does not compare favorably to those in rows 1-3 of Table 1 in the present application. The polymer prepared with MAA in place of AA also is not suitable in high-surfactant compositions because it does not provide the ability to suspend beads or the desired large negative slope at low shear (Table B, entry 2).

6. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Fanwen Zeng

Rohm and Haas Company  
100 Independence Mall West  
Philadelphia, PA 19106-2399  
Date: March 15, 2006